

## CLAIMS

1. A computer program product, tangibly embodied in an information carrier,  
comprising instructions operable to cause data processing equipment to:

5 receive user input specifying a view composition of two or more views and one or  
more navigation links, each view comprising a layout of at least one user interface element  
and each navigation link specifying a transition from a first view having an outbound plug to  
one or more second views each having an inbound plug, each navigation link connecting the  
outbound plug to each of the inbound plugs, the view composition specifying a layout of the  
views; and

10 store the view composition in a repository.

2. The computer program product of claim 1, wherein the user interface elements  
comprise one or more of input user interface elements, view user interface elements, and  
container user interface elements.

3. The computer program product of claim 1, wherein the layout comprises a  
15 pre-configured pattern of user interface elements.

4. The computer program product of claim 1, wherein the instructions to receive user  
input specifying the view composition cause the data processing equipment to:

receive user input specifying a layout of the views using view containers or specifying  
a layout of the views using a predefined number of view containers in a predefined layout.

20 5. The computer program product of claim 1 wherein the instructions to receive user  
input specifying the view composition cause the data processing equipment to:

receive user input modifying the properties of the user interface elements comprising  
the views.

6. The computer program product of claim 1, further comprising instructions to:  
25 associate the views with an application component.

7. The method of claim 1, wherein the instructions to receive user input specifying the view composition are generated using interface controls provided in at least one graphical user interface.

8. A computer program product, tangibly embodied in an information carrier,  
5 comprising instructions operable to cause data processing equipment to:

receive a view composition at runtime, the view composition having two or more views and one or more navigation links, each view comprising a layout of at least one user interface element and each navigation link specifying a transition from a first view having an outbound plug to one or more second views each having an inbound plug, each navigation  
10 link connecting the outbound plug to each of the inbound plugs; and

generate runtime code based on the received view composition to process the navigation links, such that a call to an outbound plug at runtime results in those views being displayed that have inbound plugs connected by navigation links to the called outbound plug.

9. The product of claim 8, further comprising instructions to:  
15 create a new view composition at runtime.

10. A system comprising:

means for receiving user input specifying a view composition of two or more views and one or more navigation links, each view comprising a layout of at least one user interface element and each navigation link specifying a transition from a first view having an outbound  
20 plug to one or more second views each having an inbound plug, each navigation link connecting the outbound plug to each of the inbound plugs; and

means for storing the view composition in a repository.

11. The system of claim 10, wherein the view composition comprises nested views.

12. A data structure for representing a visual interface for a computer program, comprising:

a view composition including multiple views and one or more navigation links;

each view comprising a layout of at least one user interface element; and

5 each navigation link specifying a transition from a first view having an outbound plug to one or more second views each having an inbound plug, each navigation link connecting the outbound plug to each of the inbound plugs;

wherein one or more of the views are nested.

13. The view composition of claim 12, wherein the views are nested using view  
10 containers or a predefined number of view containers in a predefined layout.

14. The view composition of claim 12, wherein the view composition is represented in XML.

15. A computer implemented method, comprising:

15 receiving user input specifying a view composition of two or more views and one or more navigation links, each view comprising a layout of at least one user interface element and each navigation link specifying a transition from a first view having an outbound plug to one or more second views each having an inbound plug, each navigation link connecting the outbound plug to each of the inbound plugs, the view composition specifying a layout of the views; and

20 storing the view composition in a repository.

16. The method of claim 15, wherein receiving user input specifying the view composition comprises:

25 receiving user input specifying a layout of the views using view containers or specifying a layout of the views using a predefined number of view containers in a predefined layout.

17. The method of claim 15, further comprising:

associating the views with an application component.

18. The method of claim 15, wherein receiving user input specifying the view composition comprises:

receiving user input specifying the view composition generated using interface controls provided in at least one graphical user interface